AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A recording apparatus comprising:

a recording medium fixing member having a plurality of suction ports on a fixed surface to fix a recording medium;

an adhering roller which is operable to contact with or operable to separate from the recording medium fixing member and which cleans the fixed surface;

a flexible plate which is attached onto the fixed surface of the recording medium fixing member and whose contact surface with the recording medium is cleaned by the adhering roller, the flexible plate comprising a plurality of distributed holes; and

a suction apparatus for recording medium fixing which sucks air from the suction ports of the recording medium fixing member and sucks and fixes the flexible plate and the recording medium onto the fixed surface,

wherein the plurality of distributed holes in the flexible plate coincide to a degree with the plurality of suction ports on the fixed surface of the recording medium fixing member such that suction from the suction apparatus is transmitted through the flexible plate to the recording medium.

2. (original): A recording apparatus according to Claim 1, wherein the adhesive strength of the adhering roller is 10-65 Hpa.

3. (original): A recording apparatus according to Claim 1, the hardness of the adhering roller 10-70°.

4. (original): A recording apparatus according to Claim 1, wherein at least either one of the recording medium fixing member or the adhering roller which are under a contacting condition with each other, is driven, and both of them are synchronously rotated.

5. (currently amended): A foreign material removal method of a recording medium of a recording device comprising a recording medium fixing member having a plurality of suction ports on a fixed surface of the recording medium, an adhering roller which cleans the fixed surface of a recording medium fixing member, a flexible plate which is attached onto the fixed surface of the recording medium fixing member, and a suction apparatus for recording medium fixing which sucks air from the suction port of the recording medium fixing member and sucks and fixes the flexible plate and the recording medium onto the recording medium fixing member, said foreign material removal method comprising:

attaching the flexible plate onto the fixed surface of the recording medium fixing member, the flexible plate comprising a plurality of distributed holes; and

cleaning the flexible plate using the adhering roller,

wherein the plurality of distributed holes in the flexible plate coincide to a degree with the plurality of suction ports on the fixed surface of the recording medium fixing member such that suction from the suction apparatus is transmitted through the flexible plate to the recording medium.

6. (currently amended): A foreign material removal method of a recording medium of a recording device comprising a recording medium fixing member having a plurality of suction

ports on a fixed surface of the recording medium, an adhering roller which cleans the fixed surface of a recording medium fixing member, a flexible plate which is attached onto the fixed surface of the recording medium fixing member and a suction apparatus for recording medium fixing which sucks air from the suction port of the recording medium fixing member and fixes by suction the flexible plate and the recording medium onto the recording medium fixing member, said foreign material removal method comprising:

attaching the flexible plate onto the fixed surface of the recording medium fixing member, the flexible plate being sucked and fixed onto the fixed surface by the suction apparatus for recording medium fixing and comprising a plurality of distributed holes, wherein the plurality of distributed holes in the flexible plate coincide to a degree with the plurality of suction ports on the fixed surface of the recording medium fixing member such that suction from the suction apparatus is transmitted through the flexible plate to the recording medium, and

cleaning the flexible plate using the adhering roller.

7. (currently amended): A foreign material removal method of a recording medium of a recording device comprising a recording medium fixing member having a plurality of suction ports on a fixed surface of the recording medium, an adhering roller which cleans the fixed surface of a recording medium fixing member, a flexible plate which is attached onto the fixed surface of the recording medium fixing member, and a suction apparatus for recording medium fixing which sucks air from the suction port of the recording medium fixing member and sucks and fixes the flexible plate and the recording medium onto the recording medium fixing member, said foreign material removal method comprising:

cleaning the fixed surface using the adhering roller; and

attaching the flexible plate onto the cleaned fixed surface of the recording medium fixing member, the flexible plate comprising a plurality of distributed holes, wherein the plurality of distributed holes in the flexible plate coincide to a degree with the plurality of suction ports on the fixed surface of the recording medium fixing member such that suction from the suction apparatus is transmitted through the flexible plate to the recording medium.

8. (withdrawn): A recording apparatus which is provided with a recording medium conveying means which holds a recording medium and conveys it from a recording medium supplying section to a recording section, wherein the apparatus is provided with a rotatable adhesive roller, and the adhesive roller comes into contact with a conveying roller which is a recording medium conveying means, and is rotated before the recording medium is conveyed corresponding to turning-on of a apparatus power supply, or recording start command.

9. (withdrawn): A recording apparatus according to Claim 8, wherein the conveying roller and the adhesive roller are provided in the condition that they are always in contact with each other.

10. (withdrawn): A recording apparatus according to Claim 8, wherein one of the conveying roller and the adhesive roller is provided so that it can be moved and brought into contact with the other.

11. (withdrawn): A recording apparatus according to Claim 10, wherein the adhesive roller is rotated by driving or being driven.

12. (withdrawn): A recording apparatus according to Claim 8, wherein the conveying rollers are formed of one pair of nip rollers, and the adhesive rollers are provided respectively corresponding to the upper conveying roller and lower conveying roller.

13. (withdrawn): A recording apparatus according to Claim 8, wherein the adhesive roller is wound by a rubber material or an adhesive material whose adhesive strength is not weaker than the conveying roller.

14. (withdrawn): A recording apparatus according to any one of Claim 8, wherein the adhesive roller is formed of the rubber whose hardness is not larger than the conveying roller.

15. (withdrawn): A recording apparatus according to Claim 8, wherein the adhesive roller is arranged at the position in the vicinity of the outside of the apparatus in the apparatus, and it is provided so that it can be easily cleaned from the outside of the apparatus or its surface can be peeled off by one round portion and renewed.

16. (withdrawn): A recording apparatus which is provided with the recording medium conveying means which holds the recording medium and conveys it from the recording medium supplying section to the recording section, wherein the recording section has a recording head for conducting the laser exposure, and an adhesive roller which is brought into contact with the conveying roller which is the recording medium conveying means, and rotated before the recording head scans on the transfer sheet of the recording medium formed of a plurality of transfer sheets successively laminated so that the toner layer is superimposed on the image receiving sheet and the image receiving layer of the image receiving sheet and conducts the laser exposure.

17. (withdrawn): A foreign material removal method in a recording apparatus which is provided with the recording medium conveying means which holds the recording medium and conveys it from the recording medium supplying section to the recording section, wherein the foreign material adhered onto the surface of the conveying roller is removed by using the

adhesive roller which is brought into contact with the conveying roller which is the recording medium conveying means and rotated before the conveyance of the recording medium corresponding to the turning-on of the power supply of the apparatus or recording start command.

18. (withdrawn): A foreign material removal method according to Claim 17, wherein, by using the adhesive roller which is provided in the condition that it is always in contact with the conveying roller, the foreign material adhered onto the surface of the conveying roller is transferred onto the adhesive roller side and removed.

19. (withdrawn): A foreign material removal method according to Claim 17, wherein, by using the adhesive roller which is moved and rotated so that it can be in contact with the conveying roller, the foreign material adhered onto the surface of the conveying roller is transferred onto the adhesive roller side and removed.

20. (withdrawn): A foreign material removal method according to Claim 18, wherein the adhesive roller which is rotated by driving or being driven is used.

21. (withdrawn): A foreign material removal method according to Claim 16 , wherein the adhesive roller around which the rubber material or adhesive material whose adhesive strength is not weaker than the conveying roller is wound, is used.

22. (withdrawn): A foreign material removal method according to Claim 17 , wherein the adhesive roller formed of the rubber whose hardness is not larger than the conveying roller is used.

23. (withdrawn): A foreign material removal method according to Claim 17 , wherein the adhesive roller which is provided at the position in the vicinity of the apparatus outside in the

apparatus, and is provided so that it can be cleaned or its surface is peeled off by one round portion and renewed from the outside of the apparatus, is used.

24. (previously presented): A recording apparatus comprising:

a recording medium supply section;

a recording medium conveying section;

a recording section; and

an adhesive roller for foreign material removal using an adhesive material disposed in at least in any one of the recording medium supply section, the recording medium conveying section, and the recording section, wherein the adhesive roller comprises a crown shape formed in such a manner that a diameter of a central portion is larger than a diameter of both end portions in an axial direction of a roller main body.

25. (previously presented): A recording apparatus according to Claim 24, wherein the crown shape is a shape in which a difference between the diameter of the both end portions in the axial direction and the diameter of the central portion is not smaller than 0.1 mm, and not larger than 2 mm.

26. (original): A recording apparatus according to Claim 24, wherein, when the diameter of the both end portions in the axial direction is d, and the diameter of the central portion is D, the crown shape is a shape set in the range of $1.002 \leqq D/d \leqq 1.11$.

27. (original): A recording apparatus according to Claim 24, wherein, when the diameter of the both end portions in the axial direction is d, the diameter of the central portion is D, and the axial length of the roller main body is L, the crown shape is a shape set in the range of $0.0001 \leqq (D - d)/L \leqq 0.005$.

28. (original): A recording apparatus according to Claim 24, wherein the recording medium supply section has a supply tray to directly conduct the hand paper feed of the recording medium.

29. (original): A recording apparatus according to Claim 24, wherein the recording medium supply section is loaded with a recording medium cassette in which a plurality of recording media are previously laminated and accommodated in a predetermined order, and the recording medium is supplied from the loaded recording medium cassette.

30. (original): A recording apparatus according to Claim 24, wherein the recording medium supply section has an opening portion to directly supply the recording medium to the recording section.

31. (previously presented): A recording apparatus according to Claim 24, wherein the adhesive material comprises TiO_x (titanium oxide).

32. (previously presented): A recording apparatus according to Claim 24, wherein the adhesive material comprises TiO_x (titanium oxide), and does not include Ba (barium).

33. (previously presented): A recording apparatus according to Claim 24, wherein the adhesive material comprises hydrocarbon compound having the functional group of C-O or Si-O.

34. (previously presented): A recording apparatus according to Claim 24, wherein the recording section comprises a rotating drum for the recording which is axially supported rotatably in a main scanning direction, and a recording head which is movably attached in a sub scanning direction almost perpendicular to the main scanning direction.

35. (previously presented): A foreign material removal method of a recording apparatus comprising a recording medium supply section, a recording medium conveying section, and a recording section, said foreign removal method comprising:

removing foreign material using an adhesive roller comprising an adhesive material, disposed in any one of the recording medium supply section, the recording medium conveying section, and the recording section, wherein the foreign material is one of a first foreign material of a recording medium or a second foreign material inside the recording apparatus and the foreign material is removed by using the adhesive roller comprising a crown shape formed in such a manner that a diameter of a central portion is larger than a diameter of both end portions in an axial direction of a roller main body.

36. (previously presented): A foreign material removal method according to Claim 35, wherein the foreign material is removed by using the adhesive roller in which a difference between the diameter of both end portions in the axial direction and the diameter of the central portion is not smaller than 0.1 mm, and not larger than 2 mm.

37. (previously presented): A foreign material removal method according to Claim 35, wherein, when the diameter of both end portions in the axial direction is d, and the diameter of the central portion is D, the foreign material is removed by using the adhesive roller having the shape set in the range of $1.002 \leqq D/d \leqq 1.11$.

38. (previously presented): A foreign material removal method according to Claim 35, wherein, when the diameter of the both end portions in the axial direction is d, the diameter of the central portion is D, and the axial length of the roller main body is L, the foreign material is

removed by using the adhesive roller having the shape set in the range of $0.0001 \leqq (D - d)/L \leqq 0.005$.

39. (previously presented): A foreign material removal method according to Claim 35, wherein the foreign material is removed by using the adhesive roller using the adhesive material comprising TiO_x (titanium oxide).

40. (previously presented): A foreign material removal method according to Claim 35, wherein the foreign material is removed by using the adhesive roller using the adhesive material comprising TiO_x (titanium oxide) and not including Ba (barium).

41. (previously presented): A foreign material removal method according to Claim 35, wherein the foreign material is removed by using the adhesive roller using the adhesive material comprising the hydrocarbon compound having the functional group of C-O or Si-O.

42. (previously presented): A foreign material removal method according to Claim 35, wherein the recording section comprises a rotating drum for the recording which is axially supported rotatably, and a recording head attached movably in a straight advance, and the foreign material is removed for the recording apparatus in which the rotating drum for the recording is rotated in a main scanning direction at high speed, and the recording head is moved in a sub scanning direction perpendicular to the main scanning direction at a low speed.

43. (previously presented): A cleaning method of a recording medium having a length parallel to a main scanning direction, the cleaning method comprising:

first removing foreign material on the recording medium surface, the first removing comprising:

bringing a cleaning roller having an adhesion property into contact with the recording medium sucked and fixed on a surface of a recording medium fixing member, the cleaning roller being in contact at about a middle portion of the length of the recording medium, and

relatively moving the cleaning roller in contact with the recording medium, in a first main scanning direction toward an end of the recording medium, and

second removing foreign material on the recording medium surface, the second removing comprising:

bringing the cleaning roller into contact with the recording medium sucked and fixed on the surface of recording medium fixing member, the cleaning roller being in contact at about the middle portion of the length of the recording medium, and

relatively moving the cleaning roller in contact with the recording medium, in a second main scanning direction opposite to the first main scanning direction, toward another end of the recording medium.

44. (previously presented): A cleaning method of a recording medium having a length parallel to a main scanning direction, the cleaning method comprising:

first removing foreign material on the recording medium surface, the first removing comprising:

bringing a cleaning roller having an adhesion property into contact with the recording medium sucked and fixed on a surface of a recording medium fixing member, the cleaning roller being in contact at about a middle portion of the length of the recording medium,

relatively moving the cleaning roller in contact with the recording medium, in a first main scanning direction toward an end of the recording medium to remove foreign material on the recording medium surface, and

separating the cleaning roller from the recording medium fixing member surface, and

second removing foreign material on the recording medium surface, the second removing comprising:

bringing the cleaning roller into contact with the recording medium sucked and fixed on the surface of recording medium fixing member, the cleaning roller being in contact at about the middle portion of the length of the recording medium,

relatively moving the cleaning roller in contact with the recording medium, in a second main scanning direction opposite to the first main scanning direction, toward another end of the recording medium, and

separating the cleaning roller from the recording medium fixing member surface.

45. (previously presented): A cleaning method of a recording medium having a length parallel to a main scanning direction, the cleaning method comprising:

first removing foreign material on the recording medium surface, the first removing comprising:

bringing a cleaning roller having an adhesion property into contact with the recording medium sucked and fixed on a surface of a recording medium fixing member, the cleaning roller being in contact at about a middle portion of the length of the recording medium, and

first relatively moving the cleaning roller in contact with the recording medium, in a first main scanning direction toward an end of the recording medium, and

separating the cleaning roller from the recording medium fixing member surface, and

second removing foreign material on the recording medium surface, the second removing comprising:

bringing the cleaning roller into contact with the recording medium sucked and fixed on the surface of recording medium fixing member, the cleaning roller being in contact at about the middle portion of the length of the recording medium, and

second relatively moving the cleaning roller in contact with the recording medium, in a reverse direction of the first relatively moving, and

separating the cleaning roller from the recording medium fixing member surface.

46. (previously presented): A cleaning method of the recording medium according to Claim 43, wherein the at about the middle portion of the length of the recording medium is positioned within a range of 50 % of the length of the recording medium from the middle of the length.

47. (previously presented): A cleaning method of the recording medium according to Claim 43, wherein the at about the middle portion of the length of the recording medium is positioned within a range of ± 25 % of the length of the recording medium from the middle of the length.

48. (previously presented): A cleaning method of the recording medium according to Claim 43, wherein a first cleaning area from the at about the middle portion of the length of the

recording medium to the end of the recording medium overlaps with a second cleaning area from the at about the middle portion of the length of the recording medium to the other of the recording medium.

49. (previously presented): A cleaning method of the recording medium according to Claim 48, wherein an overlap amount of the first cleaning area with the second cleaning area is not larger than 45 % of the length of the recording medium.

50. (previously presented): A recording method comprising:

conducting a recording corresponding to the character image data on a recording medium sucked and fixed onto a surface of a recording medium fixing member, wherein a cleaning roller having an adhesion property provided oppositely to the recording medium fixing member in such a manner that the cleaning roller is operable to contact or operable to from the fixed recording medium, and a control section which controls a contact motion and a separation motion of the cleaning roller and a relative movement motion of the recording medium fixing member and the cleaning roller according to the cleaning method of the recording medium of Claim 43, are provided.

51. (previously presented): A recording method according to Claim 50, wherein the recording medium fixing member is a rotating drum for the recording which is rotated with the recording medium fixed on a peripheral surface thereof.

52. (canceled).

53. (previously presented): A recording apparatus according to Claim 1, wherein the recording medium fixing member is disposed to one side of the flexible plate and the recording medium is disposed on another side of the flexible plate.

54. (new): A recording apparatus according to Claim 1, wherein the plurality of distributed holes in the flexible plate that coincide to the degree with the plurality of suction ports on the fixed surface of the recording medium fixing member are arranged such that at least one of the plurality of distributed holes is disposed directly over a corresponding at least one of the plurality of suction ports.